

## **Lithography Apparatus for Manufacture of Integrated Circuits**

### **ABSTRACT**

An immersion lithographic system 10 comprises an optical surface 51, an immersion fluid 60 contacting at least a portion of the optical surface, and a semiconductor structure 80 having a topmost photoresist layer 70 having a thickness of less than about 5000 angstroms, wherein a portion of the photoresist is in contact with the immersion fluid. Further, a method for illuminating a semiconductor structure 80 having a topmost photoresist layer 70 with a thickness of less than about 5000 angstroms, comprising introducing an immersion fluid 60 into a space between an optical surface 51 and the photoresist layer, and directing light preferably with a wavelength of less than about 450 nm through the immersion fluid and onto the photoresist.